Gender and mortality following hospitalisation for COPD

We read with interest the article by Gonzalez et al1 on gender differences in survival following hospitalisation of chronic obstructive pulmonary disease (COPD) patients in a large cohort of a Canadian population. There are limited data on gender differences and mortality in COPD. Despite women having worse dyspnoea and health status, they appear to have a lower mortality rate than men.2 The study conducted by Gonzalez and coworkers demonstrated an interesting finding of a significantly better mean survival and time to rehospitalisation in female patients. We conducted a study of COPD patients to evaluate the predictors of mortality and readmission after an acute exacerbation.3 The study included 402 episodes in 205 patients admitted to our university hospital. We examined a number of factors in relation to mortality and readmission after an exacerbation. The potential predictors evaluated in the study included FEV1% predicted, Medical Research Council dyspnoea scale, performance status, respiratory medications, comorbidities, social circumstances, smoking status and blood parameters including white cell count and C reactive protein. The main demographics and characteristics of the study population are shown in table 1.

The cumulative mortality of our study population was 6.8%. In terms of the cause of death, the majority of our study population died of respiratory causes, predominantly COPD, a finding very similar to that found by Gonzalez et al. Men had a higher rate of admissions than women, comprising 56% of total hospitalisation episodes. Social isolation was the only significant predictor of mortality in our cohort. Reduced physical activity in association with social isolation may be related to increased mortality. The factors associated with increased risk of readmission included lower FEV1% predicted and continued smoking. Contrary to the findings of Gonzalez et al, we found no significant difference in mortality in relation to gender, following hospitalisation for COPD. This could be because of a number of factors. First, we had a significantly smaller sample size. Second, our study may have represented a different population altogether with diversity in ethnic background and genetic makeup. Finally, the patients were younger in our cohort that may have had an effect on the overall mortality.

In our opinion, Gonzalez and coworkers have evaluated a very unique aspect of COPD outcome after hospitalisation. The immediate period after an acute exacerbation is a very significant time for interventions such as smoking cessation, and if utilised effectively, it may have a positive impact on mortality in this disabling disease.

Table 1 Selected demographics of study participants

<table>
<thead>
<tr>
<th>Subjects (n)</th>
<th>205</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age in years (median, range)</td>
<td>69 (47–93)</td>
</tr>
<tr>
<td>Gender (n, %)</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>106 (52)</td>
</tr>
<tr>
<td>Female</td>
<td>99 (48)</td>
</tr>
<tr>
<td>Admissions episodes (n, %)</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>225 (56)</td>
</tr>
<tr>
<td>Female</td>
<td>177 (44)</td>
</tr>
<tr>
<td>FEV1</td>
<td>1.9±0.7</td>
</tr>
<tr>
<td>FEV1 % predicted</td>
<td>42±16.2</td>
</tr>
<tr>
<td>Smoking (pack years)</td>
<td>27.5±9.8</td>
</tr>
<tr>
<td>Mortality (%)</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>7.6</td>
</tr>
<tr>
<td>Female</td>
<td>6.0</td>
</tr>
</tbody>
</table>

*The data are presented as mean and SD, unless otherwise stated.
FEV1, forced expiratory volume in one second.

Authors’ response

We thank Dr Fahim and colleagues1 for their interest in our paper examining gender differences in survival following chronic obstructive pulmonary disease (COPD) hospitalisation.2 Their group has previously examined possible predictors of mortality and readmission in a group of patients hospitalised for COPD.

Fahim et al report a cumulative mortality of 6.8% although the duration of follow-up in their study is not specified. In our cohort of patients hospitalised for COPD, mortality in women and men was 12.6% and 18.3% at 1 year, and 43.8% and 56.2% at 5 years, respectively. Male gender was associated with a significantly increased risk of death (HR 1.45, 95% CI 1.42 to 1.49).

Fahim et al did not observe significant gender differences in mortality. We agree that this is probably due to a significantly smaller sample size and perhaps a younger patient population. The analysis of large health administrative databases has limitations, in particular the absence of smoking status or lung function data. Yet their use provides much strength in numbers. The older age of our cohort is based on the selection of subjects aged ≥66 years, to ensure at least 1 year of prescription information prior to the index hospitalisation.

We agree with Fahim and colleagues that the period immediately following an exacerbation of COPD provides a key window for interventions. Awareness of the high death rate in older patients hospitalised for COPD and increasing recognition of gender differences in mortality and clinical expression of COPD might ultimately lead to more targeted interventions and better outcomes.

REFERENCES


CORRESPONDENCE

Atoll sign or reversed halo sign? Which term should be used?

We read with great interest the article by Walsh and Robertson reporting a case of cryptogenic organising pneumonia. The authors included wonderful images of a CT pattern they called the ‘atoll sign’, which has
been described by other authors as the ‘reversed halo sign’. Zompatori et al first used the term ‘atoll sign’ in 1999 to describe the imaging finding of a focal rounded area of ground-glass opacity surrounded by a more or less complete ring of consolidation. Although the abnormality frequently resembles an atoll, the Fleischner Society prefers the term ‘reversed halo sign’, as initially proposed by Kim et al. Although both terms adequately describe the imaging characteristics of the lesion, the term ‘reversed halo sign’ should be used to avoid confusion and to standardise the keywords used in literature searches. A review of the US National Institutes of Health digital archive of biomedical and life sciences journal literature (PubMed) found only three occurrences of the term ‘atoll sign’, whereas the term ‘reversed halo sign’ was found in 22 articles. The uniform use of descriptors is critical when reporting on lesions, to avoid the overlooking of otherwise important articles, such as the one presented by Walsh and Robertson, in literature reviews.

Edson Marchiori, 1 Klaus L Iron, 1 Gláucia Zanetti, 1 Bruno Hochhegger 1
1Rio de Janeiro Federal University, Rio de Janeiro, Brazil; 2Liverpool Heart and Chest Hospital, NHS Trust, Liverpool, UK

Correspondence to Edson Marchiori, Rio de Janeiro Federal University, Rio de Janeiro, Brazil, Rua Thomaz Cameroon, 438. Valparaíso, Petrópolis 25.685.120, Brazil; edmarchiori@gmail.com

Competing interests None.

Provenance and peer review Not commissioned; not externally peer reviewed.

Accepted 20 November 2010
Published Online First 13 January 2011
doi:10.1136/thx.2010.155481

REFERENCES


UK immigrant screening is inversely related to regional tuberculosis burden

We read with interest the editorial by Moore-Gillon et al,1 which advocated a more comprehensive system of immigrant screening/treatment for latent tuberculosis infection (LTBI) as a means of augmenting tuberculosis (TB) control in the UK. A recent comprehensive, national evaluation of local TB services/primary care organisations (PCOs) in the UK, which provides key insights into UK screening practices,2 found that the existing National Institute for Health and Clinical Excellence (NICE) guidelines on TB screening methods are infrequently reported as having a normal chest x-rays (CXR) taken. However, the term ‘reversed halo sign’ or ‘reversed halo sign’ should be used to avoid confusion and to standardise the keywords used in literature searches. A review of the US National Institutes of Health digital archive of biomedical and life sciences journal literature (PubMed) found only three occurrences of the term ‘atoll sign’, whereas the term ‘reversed halo sign’ was found in 22 articles. The uniform use of descriptors is critical when reporting on lesions, to avoid the overlooking of otherwise important articles, such as the one presented by Walsh and Robertson, in literature reviews.

Edson Marchiori, 1 Klaus L Iron, 1 Gláucia Zanetti, 1 Bruno Hochhegger 1
1Rio de Janeiro Federal University, Rio de Janeiro, Brazil; 2Liverpool Heart and Chest Hospital, NHS Trust, Liverpool, UK

Correspondence to Edson Marchiori, Rio de Janeiro Federal University, Rio de Janeiro, Brazil, Rua Thomaz Cameroon, 438. Valparaíso, Petrópolis 25.685.120, Brazil; edmarchiori@gmail.com

Competing interests None.

Provenance and peer review Not commissioned; not externally peer reviewed.

Accepted 20 November 2010
Published Online First 13 January 2011
doi:10.1136/thx.2010.155481

REFERENCES


UK immigrant screening is inversely related to regional tuberculosis burden

We read with interest the editorial by Moore-Gillon et al,1 which advocated a more comprehensive system of immigrant screening/treatment for latent tuberculosis infection (LTBI) as a means of augmenting tuberculosis (TB) control in the UK. A recent comprehensive, national evaluation of local TB services/primary care organisations (PCOs) in the UK, which provides key insights into UK screening practices,2 found that the existing National Institute for Health and Clinical Excellence (NICE) guidelines on TB screening methods are infrequently reported as having a normal chest x-rays (CXR) taken. However, the term ‘reversed halo sign’ or ‘reversed halo sign’ should be used to avoid confusion and to standardise the keywords used in literature searches. A review of the US National Institutes of Health digital archive of biomedical and life sciences journal literature (PubMed) found only three occurrences of the term ‘atoll sign’, whereas the term ‘reversed halo sign’ was found in 22 articles. The uniform use of descriptors is critical when reporting on lesions, to avoid the overlooking of otherwise important articles, such as the one presented by Walsh and Robertson, in literature reviews.

Edson Marchiori, 1 Klaus L Iron, 1 Gláucia Zanetti, 1 Bruno Hochhegger 1
1Rio de Janeiro Federal University, Rio de Janeiro, Brazil; 2Liverpool Heart and Chest Hospital, NHS Trust, Liverpool, UK

Correspondence to Edson Marchiori, Rio de Janeiro Federal University, Rio de Janeiro, Brazil, Rua Thomaz Cameroon, 438. Valparaíso, Petrópolis 25.685.120, Brazil; edmarchiori@gmail.com

Competing interests None.

Provenance and peer review Not commissioned; not externally peer reviewed.

Accepted 20 November 2010
Published Online First 13 January 2011
doi:10.1136/thx.2010.155481

REFERENCES


UK immigrant screening is inversely related to regional tuberculosis burden

We read with interest the editorial by Moore-Gillon et al,1 which advocated a more comprehensive system of immigrant screening/treatment for latent tuberculosis infection (LTBI) as a means of augmenting tuberculosis (TB) control in the UK. A recent comprehensive, national evaluation of local TB services/primary care organisations (PCOs) in the UK, which provides key insights into UK screening practices,2 found that the existing National Institute for Health and Clinical Excellence (NICE) guidelines on TB screening methods are infrequently reported as having a normal chest x-rays (CXR) taken. However, the term ‘reversed halo sign’ or ‘reversed halo sign’ should be used to avoid confusion and to standardise the keywords used in literature searches. A review of the US National Institutes of Health digital archive of biomedical and life sciences journal literature (PubMed) found only three occurrences of the term ‘atoll sign’, whereas the term ‘reversed halo sign’ was found in 22 articles. The uniform use of descriptors is critical when reporting on lesions, to avoid the overlooking of otherwise important articles, such as the one presented by Walsh and Robertson, in literature reviews.

Edson Marchiori, 1 Klaus L Iron, 1 Gláucia Zanetti, 1 Bruno Hochhegger 1
1Rio de Janeiro Federal University, Rio de Janeiro, Brazil; 2Liverpool Heart and Chest Hospital, NHS Trust, Liverpool, UK

Correspondence to Edson Marchiori, Rio de Janeiro Federal University, Rio de Janeiro, Brazil, Rua Thomaz Cameroon, 438. Valparaíso, Petrópolis 25.685.120, Brazil; edmarchiori@gmail.com

Competing interests None.

Provenance and peer review Not commissioned; not externally peer reviewed.

Accepted 20 November 2010
Published Online First 13 January 2011
doi:10.1136/thx.2010.155481